ImageWriter

ATMEL 24C Family Device Support Detail & Setup

ImageWriter Support Hierarchy

Manufacturer: Atmel **Library:** I2C-24C-Memory.cab

Device: AT24C01, AT24C01A, AT24C02, AT24C04, AT24C08, AT24C16A, AT24C11, AT24C32, AT24C64, AT24C128, AT24C256, AT24C164, AT24C256B, AT24C512, AT24C512B, AT24C1024

Objects for AT24C

Flow Object Name:	*Program / Execute*	*Verify*	*Load*	*Object Size (Bytes)*	
EE	●	●	●	AT24C01	0X80
				AT24C01A	0X80
				AT24C02	0X100
				AT24C04	0X200
				AT24C08	0X400
				AT24C16A	0X800
				AT24C11	0X80
				AT24C32	0X1000
				AT24C64	0X2000
				AT24C128	0X4000
				AT24C256	0X8000
				AT24C164	0X800
				AT24C256B	0X8000
				AT24C512	0X10000
				AT24C512B	0X10000
				AT24C1024	0X2000
p_I2C	●		●	0x8[1]	

[1] Default I2C Clock Frequency = 400KHz

Physical Layer Connector Setup for AT24C

ImageWriter:		Target:
Connector Pin #	***Pin Name***	***Connections***
1	GND	GND
2	GND	GND
3	TXD (MOSI/TDO)	NOCONN
4	RXD (MISO/TDI)	NOCONN
5	RTS (TMS)	NOCONN
6	CTS	NOCONN
7	XCLK	NOCONN
8	RST	WP
9	SCL	SCL
10	SDA	SDA
11	GND	GND
12	GND	GND
13	VPP/EXT_IN	NOCONN
14	VPP/EXT_OUT	NOCONN
15*	Target V+ (7.0V max)	Supply 2.6-5.0 V
16*	Target V+ (7.0V max)	Supply 2.6-5.0 V
17	GND	GND
18	GND	GND
19	ImageWriter Power	Supply 9-24 VDC
20	ImageWriter Power	Supply 9-24 VDC

*Maximum Pin-Driver output voltage = 4.2V. See support notes for special Device consideration.

Support Notes:

1. I2C connection must have pull-up resistors provided. If your target board does not provide pull-ups, ImageWriter can be configured to do so. See your integration guide on how to change the ImageWriter I2C pull-up resistors.
2. A post-programming EE Verify operation is highly recommended to ensure data integrity.
3. AT24C64C, AT24C256B, AT24C512B Vmax is 3.6! See manufactures documentation for more details.

Disclaimer

Typical implementation of **ImageWriter** includes but is not limited to external power provision to **ImageWriter**, device access restrictions on the target board, external hardware on the target board, or software changes created by the user affecting timing, device erasure, programming, or verification. Data I/O warranty coverage applies only when the product is used in conformance with technical specifications put forth by Data I/O and by the semiconductor device manufacturer.

In the interest of achieving the highest levels of safety and quality, Data I/O recommends that all programming processes be tested and documented in a prototype project prior to transition to volume manufacturing. For additional information see In-System Programming Design Guidelines (http://www.dataio.com/isp).

ImageWriter programs semiconductor devices through the use of circuits designed precisely to operate in accordance with specifications outlined by the device manufacturer. Provision and calibration of power supplies are critical for proper operation. **ImageWriter** has been fully tested by Data I/O Corporation for quality performance.